

Labcut 250P/Powercut 250P Abrasive Cutting Machine with special fixturing for cutting bundles of tubes or bars



Features:

- Top clamping vice with flat bottom for rows of tubes
- **Manual or automatic** cutting head
- Short cut lengths fall down chute into collector
- Outfeed with adjustable end stop
- Digital display of end stop position

Introduction

Cut to length for **small** diameter tubes or bars is a common operation in the engineering industry. The tubes are generally cut in bundles for efficiency and this leads to problems with cut length accuracy, squareness and variable burrs because of the ineffective clamping of tubes in the centre of a bundle. To overcome these problems Benetec have designed a fixture in which all the tubes are clamped tightly.

Cutting Machine

The Labcut 250P is the basic manual cutting machine which has been modified specifically for accurate cut to length operations on bundles of tubes or bars. The microfing cutting head accepts blades from 175mm/ 7in to 250mm/10in and is powered by a 3KW/ 4HP 3 phase motor. A hydrocheck is fitted to the cutting head so the manual cutting action is reproducible and adjustable for different users.

The infeed length depends on the stock length of the tube or bar. The outfeed is again dependent on the longest cut length which cannot be ejected down the chute. An end stop with digital display of position is fitted for accurate cut length setting.

A circulating coolant tank is located in the base cabinet of the cutting machine supplying coolant to the RH & LH vice clamps

Fixture

The bar or tube bundle sits tightly in a flat bottom block and is clamped by Right Hand & Left Hand top clamping bars. The offcut support has a length dependent on the shortest cut length required to fall down the chute into a collector. The end stop has a micrometer adjustment for accurate setting and rotates to allow cut pieces to fall. A digital display of end stop position is available as an option and facilitates changes in cut length. Carbide guides are fitted so that the cutting wheels do not flex.

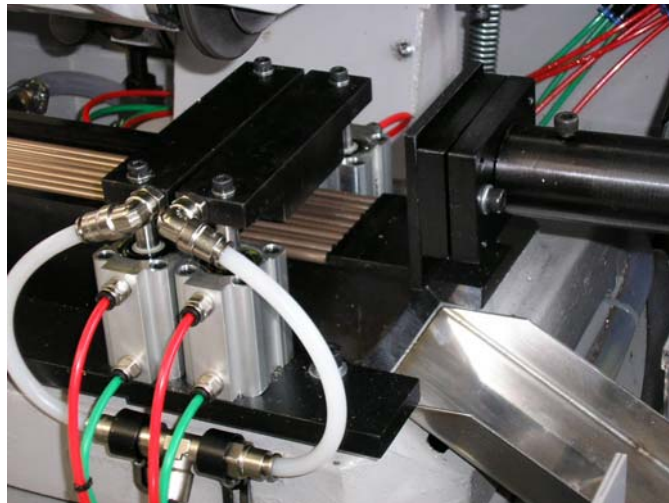
Fixture Design

Left hand & right hand (offcut) top clamps securely hold the tubes

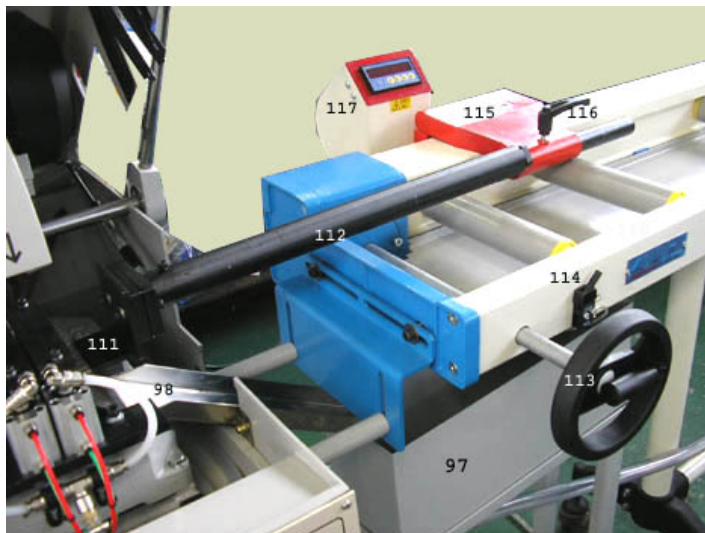
Carbide guides to minimise cutting wheel flexing

Coolant is pumped directly to top clamps and then to area of cutting, thus avoiding coolant starvation

Short cut lengths fall down chute into collector



Setting the End Stop & Ejection of cut pieces



End stop with adjustable clamp 111-115

Handle adjusts end stop along outfeed 113

Digital readout of end stop position 117

Chute & collector for short cut lengths 98-97

Powercut 250P Automatic Cutting Machine

This machine has a cutting head of similar construction to the manual Labcut 250PC and accepts the same sizes of cutting blade. However the cutting action is automatic and triggered by the front control panel START CYCLE button. The abrasive cutting blade fast approaches to a position just above the material and slowly cuts through it at a speed which can be adjusted to give the best results. The cutting blade returns to a position again just above the material and waits for the cut to be taken. Wheel wear compensation is built into the electronic design.

Ordering information:

8-025-640-P Labcut 250P Manual cutting machine for tube or bar bundles
380V 3phase 50Hz

8-025-641-P Labcut 250P Manual cutting machine for tube or bar bundles 220V 3phase 60Hz

8-025-642-P Labcut 250P Manual cutting machine for tube or bar bundles 460V 3phase 60Hz

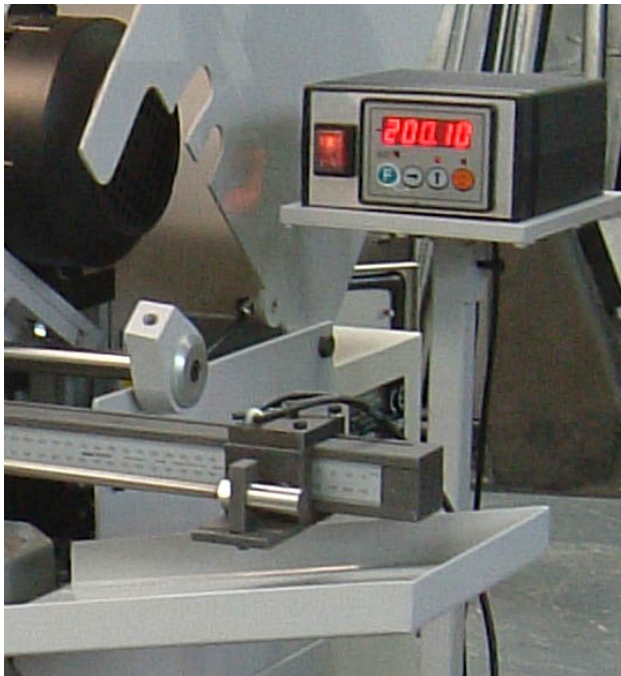
8-P25-640-P Powercut 250PC automatic cutting machine for tube or bar bundles
380V 3phase 50Hz

8-P25-641-P Powercut 250P automatic cutting machine for tube or bar bundles
220V 3phase 60Hz

8-P25-642-P Powercut 250C automatic cutting machine for tube or bar bundles
460V 3phase 60Hz

Option

7-025-716-00 Digital display of end stop position



Display of end stop position
in metric (.01mm) or inch
(0.001in)

Facilitates changing
cut length

DRO System is based on a
magnetic tape with sensor in
end stop carrier

Please contact us for your requirements in production cutting equipment

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